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**A process for preparing bi-modal molecular weight distribution copolymers  
- of ethylene with alpha-olefin(s), using a multi-site  
(metallocene/Ziegler) catalyst**

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Number of Countries: 020 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 676418	A1	19951011	EP 95302125	A	19950328	199545 B
CA 2146208	A	19951008	CA 2146208	A	19950403	199607
JP 8041118	A	19960213	JP 9582961	A	19950407	199616
EP 676418	B1	20000726	EP 95302125	A	19950328	200036
DE 69518104	E	20000831	DE 618104	A	19950328	200050
			EP 95302125	A	19950328	
ES 2150529	T3	20001201	EP 95302125	A	19950328	200105
US 6410659	B1	20020625	US 95410984	A	19950327	200246
			US 96657534	A	19960605	
			US 97904236	A	19970731	

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Cited Patents: EP 447070; EP 586168; US 5032562; US 5182244; WO 8702991; WO 9215619

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DE 69518104 E C08F-004/642 Based on patent EP 676418

ES 2150529 T3 C08F-004/642 Based on patent EP 676418

US 6410659 B1 C08F-004/64 Cont of application US 95410984

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Abstract (Basic): EP 676418 A

A process for preparing (3-20 C) bimodal molecular wt. distribution copolymers of ethylene with alpha-olefins, where the copolymers have:

(a) a comonomer distribution where the comonomer level at the mid-position of the low mol. wt. component is <3 times the level at the mid-position of the high mol.wt. component; and (b) a total average comonomer content of 0.5-20 short chain branches (SCB)/1000 C and characterised by the process being carried out in the presence of a supported multisite catalyst.

USE - To prepare copolymers of ethylene with alpha-olefins having a bimodal molecular wt. distribution:

ADVANTAGE - Through use of multisite catalysts, copolymer compsns. containing a lower absolute comonomer incorporation level of prior art may be prepared. This can lead to enhanced product properties e.g. higher stiffness for high density tough film. Dwg.0/0

Derwent Class: A17; E12

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